

What is claimed is:

1. A thermoelectric component, especially a thermocouple, having a first element and a second element which are in contact with each other in the area of at least one contact point, wherein at least in one vicinity of the contact point (12) the first element (10) and/or the second element (11) has a ceramic material.
2. The thermoelectric component as recited in Claim 1, wherein at least in one vicinity of the contact point (12), the material of the first element (10) and the material of the second element (11) are selected so that, at the contact point (12), based on the Seebeck effect, a contact voltage appears, or, based on the Peltier effect, a temperature change occurs in response to an impressed external electric current.
3. The thermoelectric component as recited in Claim 2, wherein the first element (10) and the second element (11) are electrically interconnected with a device for measuring the contact voltage, or with a device for impressing an external electric current flowing through the contact point (12).
4. The thermoelectric component as recited in at least one of the preceding claims, wherein at least in one vicinity of the contact point (12), the first element (11) is made of a first ceramic material, and the second element (12) is made of a second ceramic material different from it.
5. The thermoelectric component as recited in at least one of the preceding claims, wherein at least in one vicinity of the contact point (12), the first element (11) is made of a first ceramic

material, and the second element (12) is made of a metal that can be soldered.

6. The thermoelectric component as recited in at least one of the preceding claims, wherein at least in one vicinity of the contact point (12), the first ceramic material and/or the second ceramic material have at least one especially high-temperature-resistant filler material.
7. The thermoelectric component as recited in Claim 6, wherein the filler material is a filler material having at least approximately metallic conductivity, especially  $\text{MoSi}_2$ ,  $\text{CrSi}_2$ ,  $\text{Cr}_3\text{C}_2$ ,  $\text{TiC}$ ,  $\text{WC}$ ,  $\text{TiN}$ ,  $\text{FeCr}$ ,  $\text{FeCrNi}$ ,  $\text{ZrN}$  or  $\text{ZrC}$ , or an electrical semiconductive or insulating filler material, especially  $\text{Al}_2\text{O}_3$ ,  $\text{SiC}$ ,  $\text{B}_4\text{C}$ ,  $\text{BN}$ ,  $\text{ZrO}_2$ ,  $\text{SiO}_2$ ,  $\text{Si}_3\text{N}_4$  or graphite.
8. The thermoelectric component as recited in at least one of the preceding claims, wherein the first and/or the second ceramic material is a material which has been obtained by the pyrolysis of a polymeric precursor material or of a polymeric precursor material furnished with one or more filler materials.
9. The thermoelectric component as recited in at least one of the preceding claims, wherein the first and/or the second ceramic material contains a ceramic material based on Si-C compounds, Si-C-N compounds, Si-Ti-C-O compounds, Si-C-O compounds, Si-B-C-N compounds, Si-B-C-O compounds, B-C-N compounds, Si-Al-C-O compounds, Si-Al-N-C-O compounds or Si-C-O-N compounds.
10. The thermoelectric component as recited in at least one of the preceding claims,

wherein the material of the first element (10) and the material of the second element (11) have an at least approximately equal thermal coefficient of expansion, at least in the vicinity of the contact point (12).

11. The thermoelectric component as recited in at least one of the preceding claims,  
wherein the first ceramic material has been obtained by pyrolysis of a first polymeric precursor material or of a first polymeric precursor material furnished with a first filler material, and the second ceramic material has been obtained by pyrolysis of a second polymeric precursor material, or of a second polymeric precursor material furnished with a second filler material.
12. The thermoelectric component as recited in Claim 11,  
wherein the first polymeric precursor material and the second polymeric precursor material are selected so that, in response to a pyrolysis of the precursor materials, an at least approximately equal shrinkage occurs, at least in the vicinity of the contact point (12).
13. Use of the thermoelectric component, as recited in at least one of the preceding claims, in a thermocouple for measuring temperature or in a Peltier element as a thermoelectric heating element or cooling element.